

THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE  
ANNEXES TO THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT UNDER ARTICLE 34:  
Amended Sheets (pages 3, 3/1, 28, 28/1, 30, 30/1)

Japanese Unexamined Patent Publication (KOKAI) No. 09-132,515

【Patent Literature No. 2】

Domestic Re-publication of PCT International Publication for  
Patent Applications No. 00-064,298

DISCLOSURE OF THE INVENTION

【0008】 (Assignment to be solved by the Invention)

【0009】 The present invention is one which has been done while taking the aforementioned circumstance into consideration, and it is an object to provide a permanent treatment method which can maintain a straight-hair state of hair for a long time.

【0010】 (Means for Solving the Assignment)

【0011】 A permanent treatment method of the present invention is characterized in that: a permeating step of adhering a permanent treatment liquid, which includes thioglycolic acid, down to a position, which is adjacent to the hair root of hair, which has been shampooed and from which a hair dressing, the oil contents, and the like, have been removed, thereby permeating the permanent treatment liquid down to the hair root of the hair; and a shaping step of pulling the hair with a predetermined force while warming the hair, which is in such a state that the permanent treatment liquid is adhered thereon, to a predetermined temperature, thereby shaping it to straight hair.

【0012】 In the aforementioned permanent treatment method of the present invention, between said permeating step and said shaping step, it is preferable to be equipped with a treatment-liquid absorbing step of sprinkling a treatment powder, which adsorbs or absorbs said permanent treatment liquid, onto at least a part of said hair to transfer said permanent treatment liquid from said hair to the treatment powder, thereby stopping the shaping temporarily.

**【0013】** In the permanent treatment method of the present invention, the concentration of said thioglycolic acid, which is included in

## CLAIMS

1. (Amended) A permanent treatment method, being characterized in that it is equipped with: a permeating step of adhering a permanent treatment liquid, which includes thioglycolic acid, down to a position, which is adjacent to the hair root of hair, which has been shampooed and from which a hair dressing, the oil contents, and the like, have been removed, thereby permeating the permanent treatment liquid down to the hair root of the hair; and

a shaping step of pulling the hair with a predetermined force while warming the hair, which is in such a state that the permanent treatment liquid is adhered thereon, to a predetermined temperature, thereby shaping it to straight hair.

2. The permanent treatment method set forth in claim 1, being characterized in that, between said permeating step and said shaping step, it is equipped with a treatment-liquid absorbing step of sprinkling a treatment powder, which adsorbs or absorbs said permanent treatment liquid, onto at least a part of said hair to transfer said permanent treatment liquid from said hair to the treatment powder, thereby stopping the shaping temporarily.

3. The permanent treatment method set forth in claim 1 or 2, being characterized in that the concentration of said thioglycolic acid, which is included in said permanent treatment liquid, is 7% by weight or less of the entirety of said permanent treatment liquid.

4. The permanent treatment method set forth in claim 1 or 2, being

characterized in that said permanent treatment liquid further includes cysteine, and the sum of the concentration of said

said treatment powder is sprinkled, with ultrasonic vibrating means.

10. The permanent treatment method set forth in claim 8 or 9, being characterized in that said ultrasonic vibrating means is equipped with an ultrasonic oscillator and an ultrasonic-waves absorbing plate, which is disposed to face the oscillator with a variable interval provided therebetween; and said vibrating is carried out while holding said hair, which is in such a state that said permanent treatment liquid is adhered thereon, or said hair on which said treatment powder is sprinkled, between the ultrasonic oscillator and the absorbing plate.

11. The permanent treatment method set forth in claim 8 or 9, being characterized in that said ultrasonic vibrating means is equipped with an ultrasonic oscillator and an ultrasonic-waves reflector plate, which is disposed to face the oscillator so as to make the interval with respect to the oscillator an integer multiple of  $1/2$  of the wavelength of an ultrasonic wave, which the ultrasonic oscillator generates; and said vibrating is carried out while holding said hair, which is in such a state that said permanent treatment liquid is adhered thereon, or said hair on which said treatment powder is sprinkled, between the ultrasonic oscillator and the reflector plate.

12. (Amended) The permanent treatment method set forth in either one claim of claims 1 through 11, being characterized in that said predetermined temperature in said shaping step is  $100^{\circ}\text{C}$  or more.

13. (Added) The permanent treatment method set forth in either one

claim of claims 1 through 12, being characterized in that said predetermined force in said shaping step is  $0.5 \text{ kg/cm}^2$  or more.